

Lesson 3: Cuisenaire Rod Fill-ins

Grades: All

Part 1. Gather the students together and challenge them to fill in the Numbers Fill-ins with Cuisenaire rods. Pass out the Number Fill-ins. For the first 5-10 minutes, let students work on their own. Observe how they are filling in the outlines.

Part 2.

Once they have tried on their own, gather them together to show them something neat: it's possible to fill in the "6" using exactly six rods! Which other numbers can be filled in using that number of Cuisenaire rods? Which can't? Let them work on their own again to tackle the questions. When they find a way to build a number with that number of blocks, they can record it by coloring in outline or writing what blocks they used.

Part 3.

Discuss with students what they found. Could all numbers be made using that number of blocks? Which could and which couldn't? What strategies did students use for their building? What did students notice and wonder about the whole process? What if they wanted to make two-digit numbers like 10 and 20?

Part 4. (Optional) Students can try making two-digit numbers, or filling in other designs like the spiral.

[Number Rod Fill-ins Worksheet](#)

[Spiral Rod Fill-ins Worksheet](#)